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EXAMINER

BROWN, DREW J

ART UNIT PAPER NUMBER

3616

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/796,692	<b>Applicant(s)</b> NASH ET AL.	
	<b>Examiner</b> Drew J. Brown	<b>Art Unit</b> 3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 7/23/04 (preliminary amendment).
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/9/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the mount members positioned at different elevations relative to each other, as recited in claims 12 and 13, must be shown or the feature(s) canceled from the claim(s). The limitations appear to rely on Figure 12, where the mount members are positioned at the same elevation, and not on Figure 10, where they are positioned at different elevations. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

2. The disclosure is objected to because of the following informalities:  
In line 7 of paragraph 5, "needs been be" should be changed to --needs to be--.  
In line 2 of paragraph 6, "comprises" should be changed to --comprising--.  
Appropriate correction is required.

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***Claim Objections***

3. Claims 1, 21, and 24 are objected to because of the following informalities:

In line 5 of claim 1, "spaced being apart" should be changed to --being spaced apart--.

In line 2 of claim 21, "inclined outward upward" should be changed to --inclined outward and upward--.

In line 4 of claim 24, "each one of the mount members" should be changed to --one of the mount members--.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Regarding claim 1, the limitation that the retainers are placed on supports members renders the claim indefinite because it appears, as disclosed on page 22, paragraph 116 of the disclosure, that the support members are the same as the retainers.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-3, 14-16, 18, 19, 23, and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsukahara et al. (U.S. Pat. No. 4,735,275).

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With respect to claim 1, Tsukahara et al. discloses an off-road vehicle comprises a frame (F), at least one wheel (Wf), and a suspension arm (column 3, lines 5-10) including a plurality of ends and being configured to suspend the wheel from the frame, the frame including at least one horizontal member (Sf) extending generally horizontally fore to aft, and a set of retainers (1 and 2) coupled to the horizontal member, the retainers being spaced apart from each other fore to aft, wherein each retainer is configured to retain one of the ends of the suspension arm in a manner permitting the suspension arm to swing relative to the set of retainers (Figure 4).

With respect to claim 2, the retainers extend generally vertically relative to the horizontal member (Figure 4).

With respect to claim 3, the frame additionally includes a second horizontal member (Lf) extending generally horizontally fore to aft, where the retainers extend at least to the horizontal member, and the first and second horizontal members support the retainers. The first retainer is considered to comprise brackets (1) and (3), and part of front side (U) located between the brackets. The second retainer is considered to comprise brackets (2) and (4), and part of downpipe (D) and portions of horizontal frame members (Sw) and (Lw) that extend between the brackets.

With respect to claim 14, the retainers (1 and 2) are connected to the horizontal member (Sf, Figure 4).

With respect to claim 15, the horizontal member (Sf) has a vertical surface (outer surface edge of member Sf) extending generally vertically, and the retainers are at least partially connected to the vertical surface (Figure 4).

With respect to claim 16, the horizontal member (Sf) is a rectangular parallelepiped member (Figure 4).

With respect to claim 18, an off-road vehicle comprises a frame (Sf), at least one wheel (Wf), and a suspension arm (column 3, lines 5-10) configured to suspend the wheel from the frame, the frame including a set of vertical members extending generally vertically, the vertical members spaced apart from each other fore to aft, wherein the suspension arm is coupled to the vertical members in a manner permitting the suspension arm to swing relative to the frame. The first vertical member is considered to comprise brackets (1) and (3), and part of front side (U) located between the brackets. The second vertical member is considered to comprise brackets

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(2) and (4), and part of downpipe (D) and portions of horizontal frame members (Sw) and (Lw) that extend between the brackets.

With respect to claim 19, the frame additionally includes first (Sf) and second (Lf) horizontal members that extend generally horizontally fore to aft to support the vertical members.

With respect to claim 23, an off-road vehicle comprises a frame (Sf), at least one wheel (Wf), and a suspension arm (column 3, lines 5-10) configured to suspend the wheel from the frame. The frame includes a horizontal member that extends generally horizontally fore to aft, where the horizontal member has vertical surfaces (outer surface edge of member Sf) extending generally vertically, and a bracket unit (brackets 1 and 2) is placed on the vertical surface of the horizontal member, wherein the bracket unit is configured to retain at least a portion of the suspension arm in a manner permitting the suspension arm to swing relative to the frame (Figure 4).

With respect to claim 31, a primer mover (E) is supported by the frame to power the wheel, and the retainers are positioned on the frame at a location forward of the prime mover (Figure 3).

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 4-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukahara et al. in view of Lee (U.S. Pat. No. 5,431,429).

With respect to claims 4, 17, and 20, Tsukahara et al. discloses the claimed invention as discussed above and that a second suspension arm is spaced apart from the first suspension arm generally in the vertical direction (column 3, lines 5-10), where the retainers/support members

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swingably retain the second suspension arm therebetween, but does not disclose a link coupling the first and second suspension arms with each other, where the link is coupled to the wheel.

Lee, however, does disclose a link (1) that couples first and second suspension arms (10 and 20), where the link is coupled to a wheel (2).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Tsukahara et al. in view of the teachings of Lee to have a link coupling the suspension arms together, and further being coupled to the wheel, so the two suspension arms will swing together relative to the frame in order to provide optimal comfort for the passengers by absorbing the shock caused by the off-road terrain.

With respect to claims 5 and 21, Tsukahara et al. discloses that the tops of the retainers/vertical members are inclined outward relative to a longitudinal center plane of the frame, which extends generally vertically and fore to aft (Figure 4).

With respect to claims 6 and 22, Lee discloses that the first (10) suspension arm is disposed above the second suspension arm (20), and the second suspension arm is longer than the first suspension arm.

With respect to claim 7, Tsukahara et al. discloses that each one of the retainers has first (left flanges containing mounting holes in the retainers) and second (right flanges containing mounting holes in the retainers) surfaces opposing each other, and Lee discloses that each end of the suspension arm comprises a mount member (11) and that each one of the mount members is journaled between the first and second surfaces of one of the retainers (Figure 2).

With respect to claim 8, Tsukahara et al. discloses that the first and second surfaces extend generally vertically.

With respect to claim 9, Tsukahara et al. discloses that the first and second surfaces extend outward from the horizontal member relative to a longitudinal center plane of the frame, which extends generally vertically fore to aft (Figure 4).

With respect to claim 10, Tsukahara et al. discloses that the first and second surfaces extend outward from the horizontal member relative to a longitudinal center plane of the frame, which extends generally vertically and fore to aft (Figure 4).

With respect to claim 11, Tsukahara et al. discloses that each one end of the first and second surfaces is connected to the horizontal member (Figure 4).

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With respect to claims 12 and 13, Tsukahara et al. discloses that the mount members are positioned at different elevations relative to each other. The mount members retained within the portions (1 and 3) are positioned higher than the mount members retained within the portions (2 and 4).

With respect to claim 24, Tsukahara et al. discloses the claimed invention as discussed above and that the bracket unit comprises a set of brackets (1 and 2) spaced apart from each other fore to aft, but does not disclose that the suspension arm has end portions, where each end portion of the suspension arm has a mount member, and each one of the brackets journals one of the mount members for pivotal movement.

Although it is old and well known in the art that the brackets of Tsukahara are used to journal mount members of suspension arms for pivotal movement, Tsukahara does not specifically disclose it. Lee, however, does disclose that the suspension arm (10) has end portions, where each end portion of the suspension arm has a mount member (11), and each one of the brackets journals one of the mount members for pivotal movement (Figure 2).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Tsukahara et al. in view of the teachings of Lee to have suspension arms with mount members on end portions that are journaled for pivotal movement between the brackets in order to provide optimal comfort for the passengers by absorbing the shock caused by the off-road terrain.

With respect to claims 25 and 27, Tsukahara et al. discloses that the mount members are positioned at different elevations relative to each other. The mount member retained within the bracket (1) is positioned higher than the mount member retained within the bracket (2).

With respect to claim 26, Tsukahara et al. discloses that an upper portion (top portion of the mounting holes in bracket 1) of one of the brackets journals one of the mount members, and a lower portion (bottom portion of the mounting holes in bracket 2) of the other bracket journals the other mount member.

With respect to claim 28, Tsukahara et al. discloses that each one of the brackets has first (left flange of brackets) and second (right flange of brackets) surfaces opposing each other, and

each one of the mount members is journaled between the first and second surfaces of the respective bracket.

With respect to claim 29, Tsukahara et al. discloses that each one end of the first and second surfaces is connected to the vertical surface of the horizontal member (Figure 4).

With respect to claim 30, Lee discloses that the suspension arm has a link (1) to suspend an axle of the wheel, where the link has a first portion (portion at mount 12) coupled with the suspension arm and a second portion (portion with hole for mounting of the wheel, as shown in Figure 1) coupled with the axle of the wheel, and the first portion is positioned forward of the second portion (Figure 2).

### *Conclusion*


11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Adato, Bonnaville, Chevalier, Klais, Ishii et al., Kakamoto et al., Jones et al., Nallinger, Kelley, Kishline et al., Matsubayashi et al., Aloe et al., and Ban et al., disclose similar suspension arm mounting arrangements.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Drew J. Brown whose telephone number is 571-272-1362. The examiner can normally be reached on Monday-Thursday from 8 a.m. to 4 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul N. Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Drew J. Brown  
Examiner  
Art Unit 3616



**DAVID R. DUNN**  
**PRIMARY EXAMINER**